Attorney Docket No.: 560/6

## LISTING OF THE CLAIMS

1. (Currently Amended) A method for characterising OSI-materials, <u>comprising</u>:

with which the material is introduced introducing the material into a measurement cell-and is subjected;

<u>subjecting the material</u> to a gas mixture containing oxygen, and after; permitting a certain time or at certain one or more time intervals to elapse,;

measuring and oxygen concentration of a defined volume part of the gas mixture is measured with regard to its oxygen concentration in using a measurement circuit, in which the oxygen concentration together with the time component represents a characterisation of the OSI-material,

whereineharacterised in that the OSI-material in the measurement cell is subjected to the gas mixture circulated in a closed reaction circuit, and the defined volume part is conveyed into a-the measurement circuit-containing a gas, for the measurement of the oxygen concentration.

- 2. (Currently Amended) A-The method according to claim 1, eharacterised in that wherein  $O_2$ -scavengers and/or  $O_2$ -indicators are applied as the OSI-materials.
- 3. (Currently Amended) A-The method according to claim 1-or claim 2; characterised in that, wherein, for characterising the material in the measurement cell, in particular an O<sub>2</sub>-scavenger, at least one of: (i) the an oxygen reduction in the a gas flow in dependence on the a mass of the material is measured as a capacity variable and/or; and (ii) the temporal change of the oxygen reduction is measured as a kinetic variable.
- 4. (Currently Amended) A-The method according to one of the claims 1 to 3, characterised in that the claim 1, wherein a colour and/or a colour change of the material in dependence on the oxygen concentration is measured, for characterising the material in the measurement cell, in particular an O<sub>2</sub>-indicator.
- 5. (Currently Amended) A-<u>The</u> method according to claim 4, characterised in that wherein the colour and/or the colour change and/or the colour change in dependence on the an integral of the oxygen concentration \*multiplied by time is measured.

Attorney Docket No.: 560/6

- 6. (Currently Amended) A-The method according to one of the claims 1 to 5, characterised in that claim 4, wherein, with O<sub>2</sub>-scavenger/O<sub>2</sub>-indicator systems, the colour change of the O<sub>2</sub>-indicator in dependence on the residual capacity of the O<sub>2</sub>-scavenger is determined.
- 7. (Currently Amended) A-The method according to one of the claims 1 to 6, characterised in that claim 1, wherein, for initialising the OSI-material, the gas flow in the reaction circuit is subjected to humidity.
- 8. (Currently Amended) A The method according to one of the claims 1 to 6, characterised in that claim 1, wherein, for initialising the OSI-material, this in the measurement cell is subjected to UV-radiation.
- 9. (Currently Amended) A-The method according to one of the claims 1 to 8, characterised in that the claim 8, wherein an initialisation point or initialisation region of the OSI-material is determined depending on the at least one of a relative humidity, or the an intensity, and/or the and a wavelength region of the radiation.
  - 10. (Currently Amended) A device for characterising OSI-materials, comprising:

with a closed reaction circuit and with a measurement circuit, wherein the reaction circuit (1) comprises having a device for the supply of supplying a gas flow containing oxygen, a pump (5) for delivery of the gas flow, and a measurement cell (6) for receiving the OSI-material, and

the <u>a</u> measurement circuit (2) comprises <u>having</u> a sensor arrangement (11) for detecting oxygen, and an evaluation unit-(12),

wherein a part of the gas flow circulated in the reaction circuit may be conveyed into the measurement circuit with a defined volume.

- 11. (Currently Amended) A-The device according to claim 10, eharacterised in that wherein the measurement circuit is a closed measurement circuit and comprises a device (9) for the supply of a-the gas flow, a pump (10) for delivery of the gas flow, wherein a part (4) of the reaction circuit (1), with the defined volume, may be switched into the measurement circuit (2) via valves (7).
- 12. (Currently Amended) A-The device according to claim 10 or claim 11, characterised in that wherein the measurement circuit (2) comprises a switch-over branch (3) which may be switched into the reaction circuit (1) via the valves when the part of the reaction circuit (1) with the defined volume is switched into the measurement circuit.

Attorney Docket No.: 560/6

13. (Currently Amended) A-The device according to claim 10, characterised in that wherein the sensor arrangement (11)-contains at least one oxygen-sensitive sensor, and the evaluation unit (12)-contains an integrator.

- 14. (Currently Amended) A—<u>The</u> device according to one of the claims 10 to 13, characterised in that claim 10, wherein the device (8) for the supply of the gas flow containing oxygen into the reaction circuit (1) is connected to a humidification unit—(15), which subjects the gas flow to a humidification necessary for the initialisation of the material in the measurement cell—(6).
- 15. (Currently Amended) A—<u>The</u> device according to one of the claims 10 to 14, eharacterised in that claim 10, wherein the measurement cell (6)—is transparent to settable wavelength regions.
- 16. (Currently Amended) A-<u>The</u> device according to 15, <u>characterised in that wherein</u> a UV-radiation source which irradiates the material for its initialisation, is allocated to the measurement cell-(6).
- 17. (Currently Amended) A—<u>The</u> device according to one of the claims 10 to 16, eharacterised in that claim 1, further comprising a device for measuring the colour and/or the colour change of the material is-allocated to the measurement cell.
- 18. (Currently Amended) A—<u>The</u> device according to one of the claims 10 to 17, eharacterised in that claim 10, wherein the reaction circuit comprises a sample loop (4)-containing the defined volume part, which may be switched into the measurement circuit (2)-via multi-way valves (7).
- 19. (Currently Amended) A—<u>The</u> device according to one of the claims 10 to 18, characterised in that claim 10, wherein the components of the reaction circuit (1)—and of the measurement circuit (2) are encapsulated.